

**Mombasa Antiretroviral Therapy Program:
Monitoring and Evaluation Plan for
Pharmaceutical and Laboratory Capacity Building Activities
February 2004**

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ACRONYMS

| | |
|--------|---|
| ADR | adverse drug reaction |
| AIDS | acquired immunodeficiency syndrome |
| ART | antiretroviral therapy |
| ARV | antiretroviral [drugs] |
| CPGH | Coast Provincial General Hospital |
| FHI | Family Health International |
| GOK | Government of Kenya |
| HIV | human immunodeficiency virus |
| KEMSA | Kenya Medical Supplies Agency |
| IMPACT | Implementing AIDS Prevention and Care Project [FHI] |
| M&E | monitoring and evaluation |
| MIS | management information system |
| MOH | Ministry of Health [Kenya] |
| MSH | Management Sciences for Health |
| PEP | postexposure prophylaxis [for HIV] |
| PLHA | people living with HIV/AIDS |
| QC | quality control |
| RPM | Rational Pharmaceutical Management Plus [Program] |
| SOP | standard operating procedure |
| TAP | Technical Assistance Partners [FHI/IMPACT; MSH/RPM Plus; Population Council/Horizons] |
| USAID | U.S. Agency for International Development |

INTRODUCTION

In response to the request made by the Government of Kenya's (GOK) Ministry of Health (MOH), the United States Agency for International Development (USAID) agreed to support the strengthening of care for people living with HIV/AIDS (PLHA) in the Mombasa District of Kenya's Coast Province through the provision of antiretroviral therapy (ART) in four facilities as an integral part of the prevention-care-treatment continuum of interventions. This initiative builds upon the existing USAID/Kenya-funded HIV/AIDS prevention, care and support activities in Mombasa.

The Mombasa ART Program is intended to act as a learning initiative so that lessons learned from the program can be quickly fed back to policy makers and implementers and successfully implemented in other areas and at bigger scale. The dissemination of assessment and implementation results, tools, and lessons learned is an important component of this initiative. Organizations with expertise in different components of the initiative are helping four selected sites to implement the program. The USAID-funded agencies supporting this initiative are Family Health International (FHI)/Implementing AIDS Prevention and Care Project (IMPACT), Management Sciences for Health (MSH)/Rational Pharmaceutical Management Plus (RPM Plus) Program, and Population Council/Horizons Program. These three technical assistance partners (TAP) each have clear roles and responsibilities as defined in the Memorandum of Collaboration signed in 2002. FHI/IMPACT, in collaboration with the Kenyan MOH, is responsible for supporting the overall implementation of the Mombasa ART Program, RPM Plus for supporting the strengthening of the pharmaceutical management system and laboratory services, and Population Council/Horizons for conducting relevant operations research.

The four implementing sites are: Coast Provincial General Hospital (CPGH), a 700 bed tertiary referral hospital serving approximately 800 outpatients per day; Port Reitz District Hospital with 116 beds and 150 outpatients per day, Bomu Medical Centre (Mkomani Clinic Society), an non-governmental-managed clinic with 250 outpatients per day and Magongo Clinic managed by the local municipality serving between 80 to 100 outpatients per day. These sites all represent different levels in the Kenya health care system and act as entry points to the ART Program.

CPGH was the first of the four proposed implementing sites to begin delivering ART, and antiretroviral (ARV) drugs were dispensed to the first patient on June 3, 2003. Port Reitz District Hospital and Bomu Medical Centre began providing ART in May and June 2004 respectively. It is expected that Magongo Clinic will start the ART program early in 2005.

Purpose

The Mombasa ART Program proposal document, jointly proposed by a partnership of FHI/IMPACT Project, Population Council/Horizons Project and MSH/RPM Plus already contains the outline of the overarching monitoring and evaluation framework and some indicators. This document is intended to supplement the original proposal to describe in detail the monitoring and evaluation (M&E) of pharmaceutical and laboratory capacity building

activities for which RPM Plus is responsible. This document outlines the M&E procedures and indicators for monitoring the pharmaceutical and laboratory capacity building activities and also the link with the envisaged unified¹ M&E system of the program.

Although this is a supplemental document, primary program goals and objectives are repeated below so that the document can serve as a stand alone reference.

Goals and Objectives of the Mombasa ART Program

The overall goal of the Mombasa ART Program is to reduce HIV/AIDS-related morbidity and mortality and to improve the quality of life of PLHA and their families in Mombasa district. The specific objectives of the program are to:

1. Improve the capacity of HIV/AIDS clinics, laboratory and pharmacy services in selected public health facilities in Mombasa to provide HIV/AIDS comprehensive care including ART
2. Provide ART to 300 patients over a period of five years in accordance with eligibility criteria.
3. Sensitize and strengthen communities and PLHA support groups in HIV/AIDS comprehensive care, including ART.
4. Explore selected operations research questions.

Objective and Features of RPM Plus M&E System

The objective of the RPM Plus M&E system is to provide timely quality information to enable decision makers at appropriate levels to take corrective actions in time and ensure that efforts and other inputs are translating towards the program goal.

The key features of the RPM Plus M&E system are listed as follows:

1. Encourages analysis and use of information with the use of well defined indicators rather than only reporting. It stresses the use of data at the point where it is collected.
2. Monitors all aspects (input, process, output and quality) of the program and also covers support systems (e.g. availability of human resources and enhancement of their capacities).
3. Builds on the existing information system to ensure that additional burden is not put on the service providers by over-sizing the system.

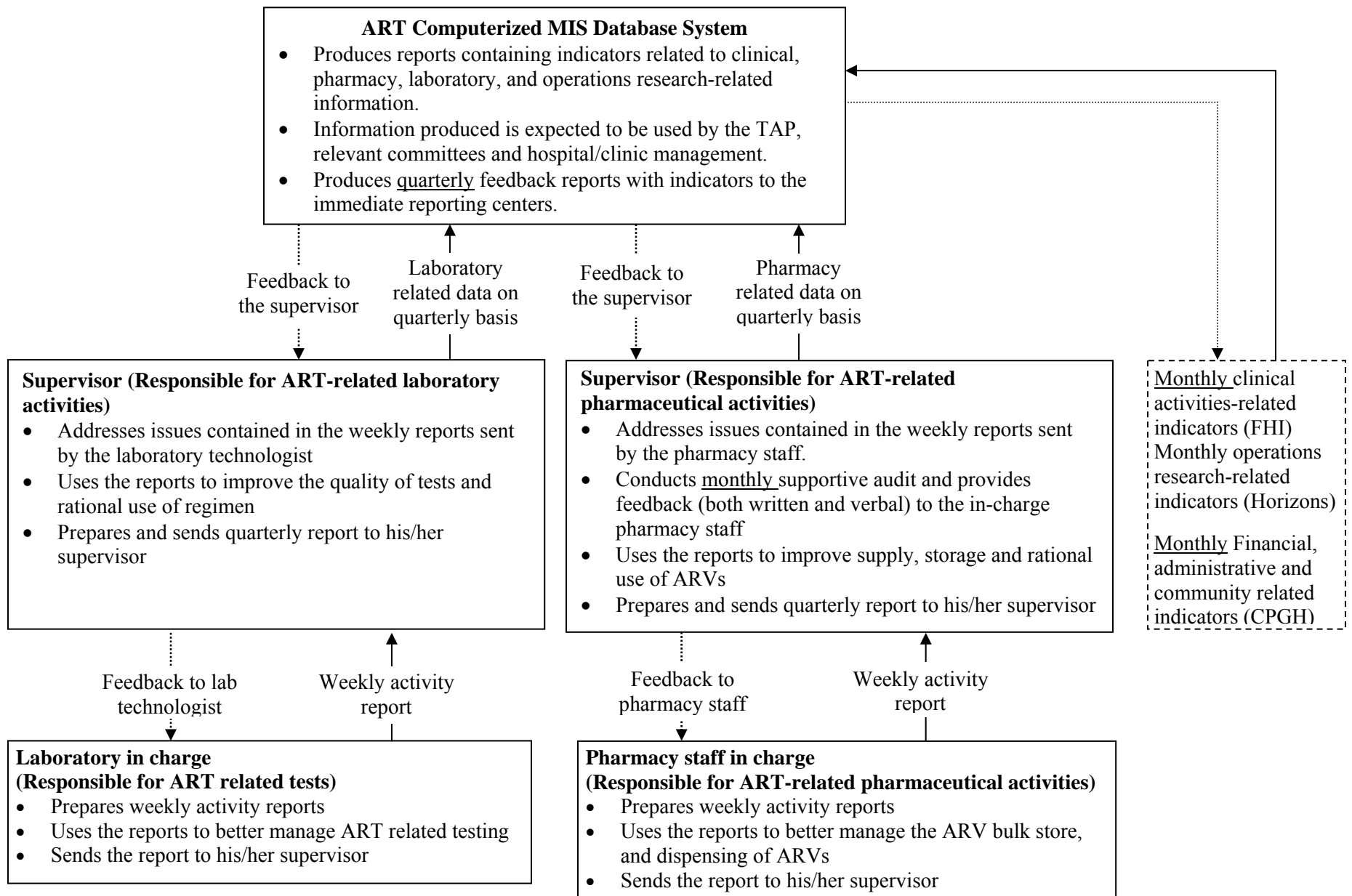
¹ A monitoring and evaluation system that fulfills information requirements of all aspects of Mombasa ART Program: clinical, pharmacy, and laboratory management and operations research.

4. Integrates feedback mechanisms at all levels.
5. Promotes sustainability of the system by making it simple and also by imparting adequate training to the staff on its modification and use.
6. Based on a manual system that is fully functional before it is computerized.

Routine Information Generation, Use and Flow

The diagram on the next page depicts the process of data collection, information generation, reporting and possible use of the information generated. Basic data is collected through activity recording instruments (e.g., bin cards, dispensing records, laboratory register etc.). Dotted lines depict the feedback path. The unified management information system (MIS) is conceived as a computerized database that takes the quarterly data from all areas of the ART program (clinical, pharmacy, laboratory and operations research) and generates indicators through an automated process. The database is also expected to have facilities to generate ad-hoc reports and provide data in formats compatible to spreadsheets and statistical programs to facilitate further analysis.

As mentioned before, it is essential to ensure that the manual system is working before automating the system. Once the manual system is fully functional the system is expected to be automated.



INDICATORS

Pharmacy Indicators

| SNo | Standard | Indicator Definition and Calculation | Data Source | Frequency Probable Use |
|---|--|---|--|--|
| <i>(Calculated from the status reported from each site)</i> | | | | |
| Standard and Procedures | | | | |
| 1. | By the end of first year of the project, 3 out of the 4 selected Mombasa ART sites will have approved implementation plans that are followed. | <i>Def:</i> # of Mombasa ART sites with an approved work plan for strengthening pharmaceutical management services for the ART program developed in collaboration with each site implementation committee and <u>that the plan is followed.</u> | Supervisory checklists (evidence of the existence of implementation plan) | This indicator will be assessed on a <u>quarterly</u> basis This indicator will monitor if the work is progressing as per approved work plan to ensure that activities are not ad-hoc. |
| 2. | All the implementing sites of ART program must have the most current version of national ART guidelines available at all times. | <i>Def:</i> # of Mombasa ART sites with most current edition of national ART guidelines available in the dispensary. | Supervisory checklists (evidence of the existence of most current national ART guidelines) | This indicator will be assessed on a <u>quarterly</u> basis This indicator will help to ensure that all the Mombasa ART sites have the most current national ART guidelines |
| 3. | All 4 Mombasa ART sites will have approved pharmaceutical standard operating procedures (SOPs) for ART services not later than six months after the program is initiated and that all the staff have easy access to it | <i>Def:</i> Number of Mombasa ART sites that have approved SOPs available within six months from the start up of the ART program and that all relevant staff have easy access to it. | Supervisory checklists | This indicator will be calculated on a <u>quarterly</u> basis This indicator will help to ensure that the pharmacy staff at all the Mombasa ART sites have access to approved SOPs |
| Storage | | | | |
| 4. | There will be a secure and acceptable temperature controlled space to store the ARVs in bulk in all of the Mombasa ART sites | <i>Def:</i> Number of Mombasa ART sites that have adequate lockable, and temperature controlled space that has a functional refrigerator to store ARVs in bulk | Supervisory checklists | This indicator will be calculated on a <u>quarterly</u> basis This indicator will help to ensure that the adequate and appropriate space is available to store ARVs as per requirements |
| 5. | There will be a secure and acceptable temperature controlled space to store the ARVs in the pharmacy in the dispensing area in all of the Mombasa ART sites | <i>Def:</i> Number of Mombasa ART sites that have adequate lockable and temperature controlled space that has a functional refrigerator to store ARVs in small quantities for dispensing | Supervisory checklists | This indicator will be calculated on a <u>quarterly</u> basis This indicator will help to ensure that the adequate and appropriate space is available to store ARVs as per requirements |

| SNo | Standard | Indicator Definition and Calculation | Data Source | Frequency Probable Use |
|------------------------------------|--|--|---|--|
| <i>(Calculated for each site)</i> | | | | |
| Skill development | | | | |
| 6. | By the third year of the project, the facility will have trained all the staff as per the implementation plan | <p><i>Def:</i> % of pharmacy staff trained by type of training module</p> <p><i>Calculation:</i> <u>Numerator:</u> Cumulative number of staff category and type of intervention <u>Denominator:</u> Total number of staff planned to be trained by category and type of intervention</p> | Training report | <p>Training report is prepared as and when the training takes place. This indicator will be included in the <u>quarterly</u> report.</p> <p>This indicator will monitor progress towards achieving the training goal for each site.</p> |
| 7. | At least 90% of the staff that are trained continue to work with the ART program. | <p><i>Def:</i> % of pharmacy staff trained² that are currently working with the ART program</p> <p><i>Calculation:</i> <u>Numerator:</u> Total number of staff trained that are currently working with the ART program <u>Denominator:</u> Total number of staff trained by type of interventions by the end of the quarter.</p> | Training report, Human resource reports | <p>This indicator will be calculated on a <u>quarterly</u> basis</p> <p>This indicator will monitor success in motivating the staff trained to continue to work with the ART program.</p> |
| Stock Management | | | | |
| 8. | All Mombasa ART sites will have unexpired stock of ARV that will be sufficient to provide services for at least one month based on the consumption over the last quarter | <p><i>Def:</i> Number of months the current stock of unexpired ARV by type will be sufficient to provide services based in the consumption during the last quarter.</p> <p><i>Calculation:</i> <u>Numerator:</u> Quantity of unexpired ARV by type that is available at the end of the month (both bulk and dispensing pharmacy) <u>Denominator:</u> Average quantity of ARV by type that was consumed per month during the last quarter</p> | Quarterly reports from the sites | <p>This indicator will be calculated by each of the facilities <u>quarterly</u></p> <p>This indicator will help each site to assess the current stock position of the ARVs and if it falls below the desired level, they should start the process of ordering needed ARVs.</p> |
| 9. | None of the ARVs will be out of stock even for a single day | <p><i>Def:</i> Number of days that ARV by type was out of stock during the last quarter</p> <p><i>Calculation:</i> Count the number of days the stock of a given drug was out of stock (0 level) from the bin cards. Consider the stock in both the bulk and pharmacy store.</p> | Quarterly reports from the sites. (Bin cards as the primary source of data.) | <p>This indicator will be calculated on a <u>quarterly</u> basis</p> <p>This indicator will help to monitor the efficiency of the supply system of ARVs.</p> |

² Pharmacy staff who successfully participated in at least one ART-related pharmacy training

Indicators

| SNo | Standard | Indicator Definition and Calculation | Data Source | Frequency Probable Use |
|------------------------------------|---|---|---|--|
| <i>(Calculated for each site)</i> | | | | |
| 10. | The physical and record count of the ARVs should exactly match each other | <p><i>Def:</i> % ARV by type whose physical count did exactly match the record in the bin cards.</p> <p><i>Calculation:</i> <u>Numerator:</u> Number of drugs whose physical count exactly corresponded to the value in the bin card <u>Denominator:</u> Total number of ARVs by type that were counted (all should be counted)</p> | Quarterly reports from the sites | <p>This indicator will be calculated on a <u>quarterly</u> basis</p> <p>This indicator will to monitor the accuracy of inventory management accounting of ARVs.</p> |
| Quality | | | | |
| 11. | ARV-related adverse drug reaction (ADR) reports are reviewed quarterly for <u>all</u> the ADRs reported | <p><i>Def:</i> % of ADR reports reviewed by the ART committee out of the total ADR cases reported</p> <p><i>Calculation:</i> <u>Numerator:</u> Number of ADR reports reviewed <u>Denominator:</u> Total number of ADR cases reported</p> | Quarterly Reports From minutes of ART committee meeting | <p>This indicator will be calculated on a <u>quarterly</u> basis</p> <p>This indicator will help us ensure that all the ARV-related ADR reports are reviewed at all the Mombasa ART sites.</p> |
| 12. | All ART prescriptions dispensed comply with the ART program guidelines/SOP | <p>% of ART prescriptions that are dispensed as per guidelines/SOP</p> <p><i>Calculation:</i> <u>Numerator:</u> Number of ART prescriptions that were correctly dispensed as per guidelines/SOP <u>Denominator:</u> Total number of ART prescriptions sampled to check</p> | Prescriptions and dispensing records. | <p>This indicator will be calculated on a <u>quarterly</u> basis</p> <p>This indicator will monitor staff adherence to the ART dispensing guidelines/SOP</p> |
| 13. | All ART patients are to be counseled by the dispensing pharmacy staff member as per the site specific SOP | <p>% of pharmacy staff member who counseled the client receiving ART as per SOP</p> <p><i>Calculation:</i> <u>Numerator:</u> Number of pharmacy staff members observed that counseled the clients receiving ART as per SOP <u>Denominator:</u> Total number of pharmacy staff members that were observed while counseling clients receiving ART</p> | Observation by the supervisor with a checklist | <p>This indicator will be calculated on a <u>quarterly</u> basis or on an ad-hoc basis</p> <p>This indicator will monitor staff adherence to the ART medication counseling guidelines/SOP</p> |
| 14. | All ART clients are able to recall the dosages of the drugs as prescribed | <p>% of ART clients interviewed who could correctly recall the dosages of all the drugs they were dispensed</p> <p><i>Calculation:</i> <u>Numerator:</u> Number of ART clients who could correctly recall the dosages of all the drugs they were dispensed <u>Denominator:</u> Total number of sampled ART clients who were asked to recall the dosages of all the drugs that they received</p> | Client interview by the supervisor | <p>This indicator will be calculated on a <u>quarterly</u> basis on an ad-hoc basis</p> <p>This indicator will monitor the quality of counseling that the pharmacy staff provide to the ART clients.</p> |

Laboratory Indicators

| SNo | Standard | Indicator Definition and Calculation | Data Source | Frequency Probable Use |
|--|--|--|--|--|
| <i>(Calculated from the status report for each site)</i> | | | | |
| Standard and Procedures | | | | |
| 1. | By the end of first year of the project, 3 out of the 4 selected Mombasa ART sites will have approved implementation plans for strengthening of laboratory services that are followed. | # of Mombasa ART sites with an approved implementation plan for strengthening laboratory services for the ART program developed in collaboration with implementation committee and <u>that the plan is followed.</u> | Supervisory checklists (evidence of the existence of implementation plan) | This indicator will be assessed on a <u>quarterly</u> basis This indicator will monitor if the work is progressing as per approved work plan to ensure that activities are not ad-hoc |
| 2. | All the implementing sites of ART program must have the most current version of national ART guidelines available at the laboratory | # of Mombasa ART implementing sites with most current edition of national ART guidelines available in the laboratory | Supervisory checklists (evidence of the existence of most current national ART guidelines) | This indicator will be assessed on a <u>quarterly</u> basis This indicator will help to ensure that all the Mombasa ART sites laboratories have the most current national ART guidelines |
| 3. | All 4 Mombasa ART sites will have approved SOPs for ART services not later than six months after the program is initiated and that all the laboratory staff have easy access to it | <i>Def:</i> Number of Mombasa ART sites that have approved SOPs available by within six months from the startup the ART program and that all relevant laboratory staff have easy access to it. | Supervisory checklists | This indicator will be calculated on a <u>quarterly</u> basis This indicator will help to ensure that all the staff at all the Mombasa ART sites laboratories have access to approved SOPs. |
| 4. | All Mombasa ART implementing sites will have site specific post exposure prophylaxis (PEP) guidelines available in the laboratory and that all the laboratory staff have easy access to it | <i>Def:</i> Number of Mombasa ART implementing sites that have site specific PEP guidelines in the laboratory and that all the laboratory staff have easy access to it | Supervisory checklists (evidence of the existence of site specific PEP guidelines) | This indicator will be calculated on a <u>quarterly</u> basis This indicator will help to ensure that all the laboratory staff have access to information on PEP guidelines/procedures |
| 5. | All Mombasa ART implementing sites will have incident/accident log book in the laboratory | <i>Def:</i> Number of Mombasa ART implementing sites that have an incident/accident log book in the laboratory | Supervisory checklists (evidence of the existence of incidence/accident log book) | This indicator will be calculated on a <u>quarterly</u> basis This indicator will help to ensure that all the laboratories maintain a record of incidents and accidents in the laboratory |

Indicators

| SNo | Standard | Indicator Definition and Calculation | Data Source | Frequency Probable Use |
|--|--|--|--|--|
| <i>(Calculated from the status report for each site)</i> | | | | |
| Equipment | | | | |
| 6. | By the end of the second project year all the Mombasa ART implementing site laboratories will be equipped as per the national guidelines | <i>Def:</i> Number of Mombasa ART implementing site laboratories that have equipment as per the national guidelines | Supervisory checklists based on the requirements of the laboratory | This indicator will be assessed on a <u>quarterly</u> basis This indicator will help to monitor the progress towards equipping the Mombasa ART sites laboratories as planned. |
| 7. | All the tracer equipment at all the sites should be functioning more than 90% of the time | <i>Def:</i> % of days the tracer equipment by type are working satisfactorily <i>Calculation:</i> <u>Numerator:</u> Number of days the tracer equipment is satisfactorily working <u>Denominator:</u> Total number of working days in the laboratory | Equipment log book | This indicator will be assessed on a <u>monthly</u> basis. This indicator will help to ensure that the laboratory work is not constrained because of the non-functioning or malfunctioning of equipment. |
| Skill development | | | | |
| 8. | By the third year of the project, the facility will have trained all the laboratory staff as per the implementation plan | <i>Def:</i> % of laboratory staff trained by type of training module <i>Calculation:</i> <u>Numerator:</u> Cumulative number of staff category and type of intervention <u>Denominator:</u> Total number of staff planned to be trained by category and type of intervention | Training report | Training report is prepared as and when the training takes place. This indicator will be included in the <u>quarterly</u> report. This indicator will monitor progress towards achieving the training goal for each site. |
| 9. | At least 90% of the staff that are trained continue to work with the ART program. | <i>Def:</i> % of laboratory staff ³ trained that are currently working with the ART program <i>Calculation:</i> <u>Numerator:</u> Total number of staff trained that are currently working with the ART program <u>Denominator:</u> Total number of staff planned to be trained by type of intervention by the end of the quarter. | Training report, Human resource reports | This indicator will be calculated on a <u>quarterly</u> basis. This indicator will monitor success in motivating the staff trained to continue to work with the ART program. |

³ Laboratory staff who successfully participated in at least one ART-related laboratory training

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| SNo | Standard | Indicator Definition and Calculation | Data Source | Frequency Probable Use |
|--|--|---|--|--|
| <i>(Calculated from the status report for each site)</i> | | | | |
| Stock of Laboratory Reagents | | | | |
| 10. | All Mombasa ART sites laboratories will have unexpired stock of tracer reagents that will be sufficient to provide services for at least one month based on the consumption over the last quarter. | <p><i>Def:</i> Number of months the current stock of unexpired tracer reagents by type will be sufficient to provide services based in the consumption during the last quarter.</p> <p><i>Calculation:</i> <u>Numerator:</u> Quantity of unexpired tracer reagents by type that is available at the end of the month in the bulk store <u>Denominator:</u> Average quantity of unexpired tracer reagents by type that was consumed per month during the last quarter</p> | Monthly reports from the site laboratories | <p>This indicator will be calculated by each of the facilities <u>monthly</u>.</p> <p>This indicator will help the site to assess the current stock position of the tracer reagents and if it falls below the desired level, to start the process of ordering.</p> |
| 11. | None of the tracer reagents will be out of stock even for a single day | <p><i>Def:</i> Number of days that the tracer reagent by type was out of stock during the last month</p> <p><i>Calculation:</i> Count the number of days the stock of a given reagent was out of stock (0 levels) from the bin cards. Consider the stock in both the main and laboratory store.</p> | Monthly reports from the laboratories (Bin cards as the primary source of data.) | <p>This indicator will be calculated on a <u>quarterly</u> basis</p> <p>This indicator will help to monitor the efficiency of the supply system of reagents</p> |
| 12. | The physical and book count of the tracer reagents should exactly match each other | <p><i>Def:</i> % reagents whose physical count did exactly match the record in the bin cards or other recording system.</p> <p><i>Calculation:</i> <u>Numerator:</u> Number of reagents whose physical count exactly corresponded to the value in the bin card <u>Denominator:</u> Total number of reagents that were counted (all should be counted)</p> | Monthly reports from the sites | <p>This indicator will be calculated on a <u>quarterly</u> basis</p> <p>This indicator will to monitor the accuracy of inventory management accounting of reagents</p> |

Indicators

| SNo | Standard | Indicator Definition and Calculation | Data Source | Frequency Probable Use |
|--|---|---|--|--|
| <i>(Calculated from the status report for each site)</i> | | | | |
| Quality | | | | |
| 13. | All ART clients are monitored for caregiver adherence to laboratory testing as per the guidelines/SOPs | <p><i>Def:</i> % of clients that receive laboratory test monitoring as per the guidelines/SOPs</p> <p><i>Calculation:</i> <u>Numerator:</u> Number clients that receive laboratory test monitoring as per the guidelines/SOPs <u>Denominator:</u> Total number of clients on ART</p> | Laboratory records and monitoring compliance tally sheet | <p>This indicator will be calculated on a <u>quarterly</u> basis</p> <p>This indicator will help to look at caregiver adherence to ART guideline for laboratory monitoring</p> |
| 14. | All ART Mombasa sites will conduct and document calibration and internal quality control (QC) on the tracer equipment as per SOP on <u>all working days</u> | <p><i>Def:</i> % of days the calibration and internal QC was performed on all tracer equipment and documented</p> <p><i>Calculation:</i> <u>Numerator:</u> Number of days the calibration and internal QC was performed and documented <u>Denominator:</u> Total number days the laboratory was open</p> | Observation by the supervisor with a checklist | <p>This indicator will be calculated on a <u>quarterly</u> basis</p> <p>This indicator will monitor adherence of the laboratory staff with the QC procedures outlined in the SOP</p> |
| 15. | More than 95% of the samples sent for external quality control will confirm with the test result of the laboratory | <p><i>Def:</i> % of samples sent for external quality control that confirmed to the test result of the laboratory</p> <p><i>Calculation:</i> <u>Numerator:</u> Number samples sent for external quality control that confirmed to the test result of the laboratory <u>Denominator:</u> Total number of samples sent for external quality control</p> | External quality control records | <p>This indicator will be calculated on a <u>quarterly</u> basis</p> <p>This indicator will help to assess the quality of testing in the laboratory</p> |

LIST OF DATA COLLECTION AND REPORTING FORMATS

The formats used to collect data and report information are listed below. A brief description of the use of the format is listed under column ‘Use’. This list includes formats that were in use before the introduction of ART program. If a format is newly introduced it is labeled as ‘Yes’ under column “New?.” Relevant formats for Magongo Municipal Clinic will be added when they become available.

CPGH Pharmacy

| Sr | New? | Form No | Description | Use |
|-----|------|-----------|--|---|
| 1. | Yes | | ART Programme: Request To Supply Antiretroviral Drugs | Requesting USAID-funded ARVs from FHI/IMPACT |
| 2. | Yes | | ART Programme: Confirmation of Receipt of Supplies/Equipment | Submitted to FHI/IMPACT to confirm receipt of USAID-funded ARVs |
| 3. | No | S13 | Counter Receipt Voucher | Checking entries on the invoice from the supplier and for payment for goods delivered |
| 4. | No | S3 | Stores Ledger and Stock Control Card | Inventory management of ARVs held in the ARV bulk store |
| 5. | No | S5 | Bulk Store Bin Card | Inventory management of ARVs held in the ARV bulk store |
| 6. | No | S11 | Counter Requisition and Issue Voucher | Used by CPGH outpatient pharmacy to requisition ARVs from the ARV bulk store and by CPGH wards to requisition ARVs from the outpatient pharmacy |
| 7. | No | S12 Rev | Issue and Receipt Voucher | Used by CPGH to transfer ARV stock to other peripheral facilities |
| 8. | No | MOH999 | Hospital Pharmacy Bin Card | Inventory management of ARVs held in the outpatient pharmacy |
| 9. | Yes | | ART Patient Dispensing Register-Summary Page - Adults | Quantification and forecasting of ARVs for adults |
| 10. | Yes | | ART Patient Dispensing Register-Summary Page - Children | Quantification and forecasting of ARVs for children |
| 11. | Yes | | ART Patient Dispensing Record-Adults | Monitoring appropriate ARV use for adults |
| 12. | Yes | | ART Patient Dispensing Record-Children | Monitoring appropriate ARV use for children |
| 13. | No | MOH501 | Prescription Form | Prescribing ARVs for outpatients |
| 14. | No | MOH306Rev | Medication Treatment Sheet | Prescribing ARVs for inpatients |
| 15. | Yes | | ARV Prepacking Record | Recording information on and reconciliation of ARVs prepacked |
| 16. | Yes | | Diflucan & ARVs Programme Monthly Report & Request | Used to quantify needs and requisition GOK ARVs from the Kenya Medical Supplies Agency (KEMSA) |
| 17. | Yes | | Diflucan & ARVs Daily Activity Register | Used to record issues and receipts of GOK ARVs to KEMSA |

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| Sr | New? | Form No | Description | Use |
|-----------|-------------|----------------|---|---|
| 18. | Yes | | Government of Kenya Ministry of Health Drugs: ART Patient Dispensing Record | Quantification and forecasting of ARVs for adults |
| 19. | Yes | | Shipment Discrepancy Report | Recording shipping discrepancies |
| 20. | Yes | | Stock Count Discrepancy Report | Recording stock count discrepancies |
| 21. | Yes | | ART Programme: Request to Exchange Short-Dated Antiretroviral Drugs | Requesting FHI to arrange the exchange of short-dated stock |
| 22. | Yes | CTEX | Chart to Track the Expiry Dates of Drugs | Helps to visually track the dates of expiry of drugs |
| 23. | Yes | | ART Adverse Drug Reaction (ADR) Form | Reporting suspected adverse drug reactions to ARVs |
| 24. | Yes | | ART Adverse Drug Reaction Report | Reporting probability score and category for each ADR reported to ARVs |
| 25. | Yes | | ADR Summary Reports Part I, II, III | Reporting aggregate data of ADRs reported to ARVs |
| 26. | Yes | | Medication Error Report | Reporting medication errors |
| 27. | Yes | | Temperature Control Log: ARV Bulk Store | Monitoring temperature |
| 28. | Yes | | Temperature Control Log: ARV Bulk Store Refrigerator | Monitoring temperature |
| 29. | Yes | | Temperature Control Log: Outpatient Pharmacy | Monitoring temperature |
| 30. | Yes | | ART Program: Notification of ARVs Set Aside for Disposal | Notification to and approval of FHI/IMPACT for disposal of USAID-funded ARVs |
| 31. | | F.O. 58 | Report of The Board of Survey on Stores (Unserviceable and Surplus to Requirements) | Notification to and approval of GOK for disposal of ARVs |
| 32. | Yes | FMAF | ART Programme: Pharmacy Internal Audit | Used by the CPGH audit committee to audit pharmacy-related activities |
| 33. | Yes | | ART Programme: Pharmacy Audit Feedback Report to Chief Administrator | Used by the CPGH audit committee to provide feedback on the audit of pharmacy-related activities to the Chief Administrator |
| 34. | Yes | FWAR | ART Programme: Pharmacy Activity Report | Used by pharmacy to record monthly activity and report to the pharmacy supervisor |

CPGH Laboratory

| SN | New? | Form No | Description | Use |
|-----|------|---------|--|--|
| 1. | Yes | | ART Programme Laboratory Request Form | Used by the ARV prescribing clinician to request laboratory tests |
| 2. | Yes | | ART Laboratory Report Form (Haematology) | Used to report the results of the tests to the ARV prescribing clinician |
| 3. | Yes | | ART Laboratory Report Form (Clinical Chemistry) | Used to report the results of the tests to the ARV prescribing clinician |
| 4. | Yes | | Sample Collection Register | Used by the Outpatient Laboratory to record the receipt of outpatient specimens and status |
| 5. | ? | | Laboratory Activity Register | Used to record receipt of specimens at the main laboratory and to allocate a unique number for tracking |
| 6. | No | | HIV Register | Used to record the identity of person, the test result, the type of kit(s) used, and the identity of technologist/ technician who ran the test |
| 7. | No | | CPGH Office File Daily HIV Log | Used for quick retrieval of HIV results for administrative use |
| 8. | ? | | Haematology Analysis Register | Used to record tests performed, results, reasons for rejecting samples, calibration and internal quality controls performed |
| 9. | ? | | Clinical Chemistry Analysis Register | Used to record tests performed, results, reasons for rejecting samples, calibration and internal quality controls performed |
| 10. | No | | Blood Glucose Register | Used at nights and weekends to record tests performed, results, and reasons for rejecting samples |
| 11. | Yes | | CD4/CD8 Testing Register | Used to record CD4/CD8 test results |
| 12. | Yes | | Laboratory Incident/Accident Register | Used to record and monitor accidents and incidents that occur in the laboratory |
| 13. | Yes | | Temperature Control Log: Reagent and Supplies Refrigerator | Monitoring temperature |
| 14. | Yes | | Temperature Control Log: Incubator | Monitoring temperature |
| 15. | Yes | | Temperature Control Log: -70 Degrees Freezer | Monitoring temperature |
| 16. | Yes | | Laboratory Equipment Maintenance Log Book | Used by each laboratory section for recording and monitoring equipment servicing, calibration and frequency of breakdowns |
| 17. | Yes | | Coast Provincial General Hospital ART Programme: Request for Laboratory Supplies | Requesting reagents and supplies from FHI/IMPACT |
| 18. | Yes | | ART Programme: Confirmation of Receipt of Supplies/Equipment | Submitted to FHI/IMPACT to confirm receipt of reagents and supplies |
| 19. | No | MOH999 | Hospital Pharmacy Bin Card | Inventory management of reagents and supplies held in the laboratory |

Port Reitz District Hospital Pharmacy

| Sr | New? | Form No | Description | Use |
|-----|------|------------|---|---|
| 1. | Yes | | ART Programme: Request To Supply Antiretroviral Drugs | Requesting USAID-funded ARVs from FHI/IMPACT |
| 2. | Yes | | Port Reitz District Hospital ARV Consumption Record Adults | Used to report consumption of ARVs for adults to FHI/IMPACT |
| 3. | Yes | | Port Reitz District Hospital ARV Consumption Record Children | Used to report consumption of ARVs for children to FHI/IMPACT |
| 4. | Yes | | ART Programme: Confirmation of Receipt of Supplies/Equipment | Submitted to FHI/IMPACT to confirm receipt of USAID-funded ARVs |
| 5. | No | S5 | Bulk Store Bin Card | Inventory management of ARVs held in the ARV bulk store |
| 6. | No | S11 | Counter Requisition and Issue Voucher | Used by PRDH outpatient pharmacy to requisition ARVs from the ART bulk store and by PRDH wards to requisition ARVs from the outpatient pharmacy |
| 7. | No | S12 Rev | Issue and Receipt Voucher | Used to order from and transfer ARV stock to other peripheral facilities |
| 8. | No | MOH999 | Hospital Pharmacy Bin Card | Inventory management of ARVs held in the outpatient pharmacy |
| 9. | Yes | | ART Patient Dispensing Register-Summary Page - Adults | Quantification and forecasting of ARVs for adults |
| 10. | Yes | | ART Patient Dispensing Register-Summary Page - Children | Quantification and forecasting of ARVs for children |
| 11. | Yes | | ART Patient Dispensing Record- Adults | Monitoring appropriate ARV use for adults |
| 12. | Yes | | ART Patient Dispensing Record- Children | Monitoring appropriate ARV use for children |
| 13. | No | | Prescription Form | Prescribing ARVs for outpatients |
| 14. | No | MOH306 Rev | Medication Treatment Sheet | Prescribing ARVs for inpatients |
| 15. | Yes | | Port Reitz District Hospital ARV Prepacking Record | Recording information on and reconciliation of ARVs prepacked |
| 16. | Yes | | Diflucan & ARVs Programme Monthly Report & Request | Used to quantify needs and requisition GOK ARVs from KEMSA |
| 17. | Yes | | Diflucan & ARVs Daily Activity Register | Used to record issues and receipts of GOK ARVs to KEMSA |
| 18. | Yes | | Government of Kenya Ministry of Health Drugs: ART Patient Dispensing Record | Quantification and forecasting of ARVs for adults |
| 19. | Yes | | Shipment Discrepancy Report | Recording shipping discrepancies |
| 20. | Yes | | Stock Count Discrepancy Report | Recording stock count discrepancies |
| 21. | Yes | | ART Programme: Request to Exchange Short-Dated Antiretroviral Drugs | Requesting FHI to arrange the exchange of short-dated stock |
| 22. | Yes | CTEX | Chart to Track the Expiry Dates of Drugs | Helps to visually track the dates of expiry of drugs |

List of Data Collection and Reporting Formats

| Sr | New? | Form No | Description | Use |
|-----------|-------------|----------------|---|---|
| 23. | Yes | | ART Adverse Drug Reaction (ADR) Form | Reporting suspected adverse drug reactions to ARVs |
| 24. | Yes | | ART Adverse Drug Reaction Report | Reporting probability score and category for each ADR reported to ARVs |
| 35. | Yes | | ADR Summary Reports Part I, II, III | Reporting aggregate data of ADRs reported to ARVs |
| 25. | Yes | | Medication Error Report | Reporting medication errors |
| 26. | Yes | | Temperature Control Log: ARV Bulk Store/Dispensing Stock | Monitoring temperature |
| 27. | Yes | | Temperature Control Log: ARV Bulk Store Refrigerator | Monitoring temperature |
| 28. | Yes | | ART Program: Notification of ARVs Set Aside for Disposal | Notification to and approval of FHI/IMPACT for disposal of USAID-funded ARVs |
| 29. | | F.O. 58 | Report of The Board of Survey on Stores (Unserviceable and Surplus to Requirements) | Notification to and approval of GOK for disposal of ARVs |
| 30. | Yes | FMAF | ART Programme: Pharmacy Internal Audit | Used by the audit committee to audit pharmacy-related activities |
| 31. | Yes | | ART Programme: Pharmacy Audit Feedback Report to the Medical Superintendent | Used by the audit committee to provide feedback on the audit of pharmacy-related activities to the Medical Superintendent |
| 32. | Yes | FWAR | ART Programme: Pharmacy Activity Report | Used by pharmacy to record monthly activity and report to the pharmacy supervisor |

Port Reitz District Hospital Laboratory

| SN | New? | Form No | Description | Use |
|-----|------|---------|---|--|
| 1. | Yes | | ART Programme Laboratory Request Form | Used by the ARV prescribing clinician to request laboratory tests |
| 2. | ? | | Laboratory Activity Register | Used to record receipt of specimens at the laboratory, allocate a unique number for tracking and record results |
| 3. | No | | HIV Register | Used to record the identity of person, the test result, the type of kit(s) used, and the identity of technologist/ technician who ran the test |
| 4. | Yes | | Test Results from CPGH Register | Used to record and track specimens sent to CPGH for testing and record results received |
| 5. | Yes | | CD4/CD8 Test Result Register | Used to record CD4/CD8 test results (performed by CPGH) |
| 6. | Yes | | Laboratory Incident/Accident Register | Used to record and monitor accidents and incidents that occur in the laboratory |
| 7. | Yes | | Temperature Control Log: Reagent and Supplies Refrigerator | Monitoring temperature |
| 8. | Yes | | Temperature Control Log: Incubator | Monitoring temperature |
| 9. | Yes | | Port Reitz District Hospital ART Programme: Request for Laboratory Supplies | Requesting reagents and supplies from FHI/IMPACT |
| 10. | Yes | | ART Programme: Confirmation of Receipt of Supplies/Equipment | Submitted to FHI/IMPACT to confirm receipt of reagents and supplies |

Bomu Medical Centre Pharmacy

| Sr | New? | Form No | Description | Use |
|-----------|-------------|----------------|---|---|
| 1. | Yes | | ART Programme: Request To Supply Antiretroviral Drugs | Requesting USAID-funded ARVs from FHI/IMPACT |
| 2. | Yes | | Bomu Medical Centre ARV Consumption Record Adults | Used to report consumption of ARVs for adults to FHI/IMPACT |
| 3. | Yes | | Bomu Medical Centre ARV Consumption Record Children | Used to report consumption of ARVs for children to FHI/IMPACT |
| 4. | Yes | | ART Programme: Confirmation of Receipt of Supplies/Equipment | Submitted to FHI/IMPACT to confirm receipt of USAID-funded ARVs |
| 5. | No | | Bomu Medical Centre Bin Card/Main Store | Inventory management of ARVs held in the main store |
| 6. | Yes | | Pharmacy ARV Order Book | Used by pharmacy to requisition ARVs from the main store |
| 7. | No | | Bomu Medical Centre Bin Card/ARV Pharmacy Store | Inventory management of ARVs held in the pharmacy |
| 8. | Yes | | ARV Drug Daily Issues Record | Used as a countercheck for inventory control of all ARVs issued from the ARV Pharmacy Store |
| 9. | Yes | | ART Patient Dispensing Register-Summary Page - Adults | Quantification and forecasting of ARVs for adults |
| 10. | Yes | | ART Patient Dispensing Register-Summary Page - Children | Quantification and forecasting of ARVs for children |
| 11. | Yes | | ART Patient Dispensing Record- Adults | Monitoring appropriate ARV use for adults |
| 12. | Yes | | ART Patient Dispensing Record- Children | Monitoring appropriate ARV use for children |
| 13. | Yes | | Pharmacy Monthly Consumption Report – Antiretroviral Drugs | Used to quantify needs |
| 14. | No | | Prescription Form | Prescribing ARVs for outpatients |
| 15. | Yes | | Diflucan & ARVs Programme Monthly Report & Request | Used to quantify needs and requisition GOK ARVs from KEMSA |
| 16. | Yes | | Diflucan & ARVs Daily Activity Register | Used to record issues and receipts of GOK ARVs to KEMSA |
| 17. | Yes | | Government of Kenya Ministry of Health Drugs: ART Patient Dispensing Record | Quantification and forecasting of ARVs for adults |
| 18. | Yes | | Shipment Discrepancy Report | Recording shipping discrepancies |
| 19. | Yes | | Stock Count Discrepancy Report | Recording stock count discrepancies |
| 20. | Yes | | ART Programme: Request to Exchange Short-Dated Antiretroviral Drugs | Requesting FHI to arrange the exchange of short-dated stock |
| 21. | Yes | CTEX | Chart to Track the Expiry Dates of Drugs | Helps to visually track the dates of expiry of drugs |
| 22. | Yes | | ART Adverse Drug Reaction (ADR) Form | Reporting suspected adverse drug reactions to ARVs |
| 23. | Yes | | ART Adverse Drug Reaction Report | Reporting probability score and category for each ADR reported to ARVs |

Mombasa ART Program: Monitoring & Evaluation Plan for Pharmaceutical and Laboratory Capacity Building

| Sr | New? | Form No | Description | Use |
|-----------|-------------|----------------|---|--|
| 24. | Yes | | ADR Summary Reports Part I, II, III | Reporting aggregate data of ADRs reported to ARVs |
| 25. | Yes | | Medication Error Report | Reporting medication errors |
| 26. | Yes | | Temperature Control Log: ARV Pharmacy Store | Monitoring temperature |
| 27. | Yes | | Temperature Control Log: ARV Pharmacy Store Refrigerator | Monitoring temperature |
| 28. | Yes | | ART Program: Notification of ARVs Set Aside for Disposal | Notification to and approval of FHI/IMPACT for disposal of USAID-funded ARVs |
| 29. | Yes | | Bomu Medical Centre: Drug Disposal Record | Notification to and approval of Chief Executive for disposal of drugs |
| 30. | | F.O. 58 | Report of The Board of Survey on Stores (Unserviceable and Surplus to Requirements) | Notification to and approval of GOK for disposal of ARVs |
| 31. | Yes | FMAF | ART Programme: Pharmacy Internal Audit | Used by the audit committee to audit pharmacy-related activities |
| 32. | Yes | | ART Programme: Pharmacy Audit Feedback Report to Chief Executive | Used by the audit committee to provide feedback on the audit of pharmacy-related activities to the Chief Executive |
| 33. | Yes | FWAR | ART Programme: Pharmacy Activity Report | Used by pharmacy to record monthly activity and report to the pharmacy supervisor |

Bomu Medical Centre Laboratory

| SN | New? | Form No | Description | Use |
|-----------|-------------|----------------|---|--|
| 1. | Yes | | ART Programme Laboratory Request Form | Used by the ARV prescribing clinician to request laboratory tests |
| 2. | Yes | | ART Laboratory Report Form (Haematology) | Used by the laboratory to report the results of tests to the ARV prescribing clinician |
| 3. | Yes | | ART Laboratory Report Form (Clinical Chemistry) | Used by the laboratory to report the results of tests to the ARV prescribing clinician |
| 4. | ? | | Laboratory Activity Register | Used to record receipt of specimens at the main laboratory and to allocate a unique number for tracking |
| 5. | No | | HIV Register | Used to record the identity of person, the test result, the type of kit(s) used, and the identity of technologist/ technician who ran the test |
| 6. | ? | | Haematology Analysis Register | Used to record tests performed, results, reasons for rejecting samples, calibration and internal quality controls performed |
| 7. | Yes | | Clinical Chemistry Analysis Register | Used to record tests performed, results, reasons for rejecting samples, calibration and internal quality controls performed |
| 8. | Yes | | Test Results from CPGH Register | Used to record and track specimens sent to CPGH for testing and record results received |
| 9. | Yes | | CD4/CD8 Test Result Register | Used to record CD4/CD8 test results (performed by CPGH) |
| 10. | Yes | | Laboratory Incident/Accident Register | Used to record and monitor accidents and incidents that occur in the laboratory |
| 11. | Yes | | Temperature Control Log: Reagent and Supplies Refrigerator | Monitoring temperature |
| 12. | Yes | | Temperature Control Log: Incubator | Monitoring temperature |
| 13. | Yes | | Laboratory Equipment Maintenance Log Book | Used by the laboratory for recording and monitoring equipment servicing, calibration and frequency of breakdowns |
| 14. | Yes | | Bomu Medical Centre: ART Programme: Request for Laboratory Supplies | Requesting reagents and supplies from FHI/IMPACT |
| 15. | Yes | | ART Programme: Confirmation of Receipt of Supplies/Equipment | Submitted to FHI/IMPACT to confirm receipt of reagents and supplies |
| 16. | No | | Laboratory Order Book | Requesting reagents and supplies from the man store |

